Appl. No. 09/868,968

Amdt. Dated September 5, 2003

Reply to Office action of March 6, 2003.

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

These amendments introduce no new matter and support for the amendments is replete throughout the specification and claims as originally filed. These amendments are made without prejudice and are not to be construed as abandonment of the previously claimed subject matter, or agreement with any objection or rejection of record.

Listing of Claims:

- Claims 1-21 (Cancelled)
 22. (Currently Amended) A method of reducing tumor cell proliferation comprising contacting a tumore-tumor cell with a substance which is an inositolphosphoglycan (IPG) antagonist having the property of reducing tumor cell proliferation.
- 23. (Previously Presented) The method of claim 22, wherein the tumor cell is in vivo in a subject and the substance is administered to the subject for the treatment of cancer.
- 24. (Previously Presented) The method of claim 22, wherein the IPG antagonist is:
 - (a) a substance which is capable of inhibiting the release of IPGs; or,
 - (b) a substance capable of reducing the levels of IPGs by binding to the IPGs; or,
 - (c) a substance which is a competitive agent which is capable of reducing an effect of IPGs.
 - 25. (Previously Presented) The method of claim 24, wherein the IPG antagonist is a competitive

IPG antagonist.

- 26. (Previously Presented) The method of claim 24, wherein the IPG antagonist is an anti-IPG antibody which is capable of specifically binding IPGs.
- 27. (Previously Presented) The method of claim 26, wherein the antibody is capable of neutralizing an activity of the IPGs.



Appl. No. 09/868,968 Amdt. Dated September 5, 2003 Reply to Office action of **March 6, 2003**.

28. (Previously Presented) The method of claim 27, wherein activity of the IPGs is the proliferation of tumor cells.

- 29. (Previously Presented) The method of claim 26, wherein the antibody is a monoclonal antibody produced by hybridoma 2F7, 2D1 or 5H6, deposited at ECACC under accession numbers 98051201, 98031212 and 98030901, respectively.
- 30. (Previously Presented) The method of claim 24, wherein the antagonist is an inhibitor of glycosylphosphadtidylinositol specific phospholipase type C (GPI-PLC).
- 31. (Withdrawn) A method for the diagnosis and/or prognosis of cancer, the method comprising determining the presence or amount of inositolphosphoglycans in a sample from a patient.
- 32. (Withdrawn) The method of claim 31, wherein the presence or amount of the IPGs is causing tumor cell proliferation.
 - 33. (Withdrawn) The method of claim 31, wherein the method comprises:
 - (a) contacting a sample from a patient with a solid support having immobilized thereon a binding agent having a binding site which is capable of specifically binding to the IPGs under conditions in which the IPGs bind to the binding agent; and,
 - (b) determining the presence or amount of the IPGs bound to the binding agent.
 - 34. (Withdrawn) The method of claim 33, wherein step (b) comprises
 - (i) contacting the solid support with a developing agent which is capable of binding to occupied binding sites, unoccupied binding sites or the bound IPGs, the developing agent comprising a label, and (ii) detecting the label to obtain a value representative of the presence or amount of the IPGs in the sample.
- 35. (Withdrawn) The method of claim 34, further comprising comparing the value with standards from healthy or cancerous tissues.



Appl. No. 09/868,968 Amdt. Dated September 5, 2003 Reply to Office action of March 6, 2003.

36. (Withdrawn) The method of claim 34, wherein the label is selected from the group consisting of a radioactive label; a chemiluminescent label; a fluorophor; a phosphor; a laser dye; a chromogenic dye; a macromolecular colloidal particle; a latex bead which is coloured, magnetic or paramagnetic; and an enzyme which catalyses a reaction producing a detectable result.

- 37. (Withdrawn) The method of claim 33, wherein the binding agent immobilized on the solid support is an antibody which is capable of binding to the IPGs.
- 38. (Withdrawn) The method of claim 33, wherein the binding agent is immobilized at a predefined location on the solid support.
- 39. (Withdrawn) A method for purifying or isolating a P or A-type substance, wherein the substance is a cyclitol containing carbohydrate which is:
 - (i) a P-type substance having the biological activity of activating pyruvate dehydrogenase (PDH) phosphatase; or,
 - (ii) an A-type substance having the biological activity of inhibiting cAMP dependent protein kinase,

wherein the method comprises contacting a sample containing P or A-type substance with microcrystalline cellulose.

- 40. (Withdrawn) The method of claim 39, wherein the method involves contacting a sample containing P or A-type substance with a column containing cellulose and eluting the substance from the column.
- 41. (Withdrawn) A method of purifying or isolating a P or A-type substance, wherein the substance is a cyclitol containing carbohydrate which is:
 - (i) a P-type substance having the biological activity of activating pyruvate dehydrogenase (PDH) phosphatase; or,
 - (ii) an A-type substance having the biological activity of inhibiting cAMP dependent protein kinase; wherein the method comprises:
 - (a) loading a column containing microcrystalline cellulose with a sample containing the P or A-type substance so that P or A-type substance binds to the column; and,
 - (b) eluting the P or A-type substance from the column.



Appl. No. 09/868,968 Amdt. Dated September 5, 2003 Reply to Office action of March 6, 2003.

- 42. (Withdrawn) The method of claim 41, further comprising the step of dissolving the sample containing the P or A-type substance in 4/1/1 butanol/water/ethanol (B:W:E) prior loading on the column.
- 43. (Withdrawn) The method of claim 41, further comprising the step of washing the column with B:W:E and methanol.
- 44. (New) A method of reducing tumor cell proliferation, the method comprising contacting a tumor cell with a substance, which substance is an inositolphosphoglycan (IPG) antagonist capable of inhibiting the release of IPGs and having the property of reducing tumor cell proliferation.
- 45. (New) A method of reducing tumor cell proliferation, the method comprising contacting a tumor cell with a substance, which substance is an inositolphosphoglycan (IPG) antagonist capable of reducing the levels of IPGs by binding to the IPGs and having the property of reducing tumor cell proliferation.
- 46. (New) A method of reducing tumor cell proliferation, the method comprising contacting a tumor cell with a substance, which substance is an inositolphosphoglycan (IPG) antagonist and which substance is a competitive agent capable of reducing an effect of IPGs and having the property of reducing tumor cell proliferation.